

(a) Title of the Invention.

Dog Watering Toy

(b) Cross-References to Related Applications.

This application incorporates provisional patent application number 60/222,974 by this reference. Provisional patent application number 60/222,974 has an application filing date of 08/04/2000. Applicant claims the benefit of the filing date of that provisional application by reason of this incorporation by reference.

(c) Statement as to Rights to Inventions made under Federally-Sponsored Research and Development.

This invention was not made under federally sponsored research and development. Applicant retains all rights.

(d) Background of the Invention.

§ 1. Field of the Invention

This invention falls within the field of dog toys which can be chewed or manipulated with the jaws. It also falls within the field of mechanisms by which a controlled supply of water can be provided to a pet.

§ 2. Description of Related Art Including Information Disclosed Under 37 CFR Sections 1.97 and 1.98.

Chewable dog toys are known to the art. They are often a plastic or rubber article made to resemble a steak, burger or bone which is suitably sized so that the dog can chew on the toy comfortably. They may also be composed of a substance which is edible to the dog, such as rawhide. At times a noisemaker is provided, such as a bell inside. Dog toys are known which are hollow and provided with an air escape passage that has a reed type noise maker. Such a toy will make noise as it is chewed.

Over the years, the Pet Industry has introduced and developed a wide assortment of products designed to provide a watering source for thirsty canines. Even so, all of these products have been either in the "bowl type" and/or "hose type" categories. The bowl type devices can hold a lot of water, but are not portable when full and tend to make a mess if they are spilled and/or sloshed by a playful canine. The hose type are good for outdoor use, but require a continuous water flow regardless of canine use which can lead to expensive and troublesome water build-up for the property owner. Neither watering source is suited for adventurous play away from populated areas and while the dog is being transported.

(e) Summary of the Invention.

This invention is an improvement over the prior art which

allows the above described chewable dog toys to be filled with water. The invention may also take the form of a chewable water dispenser which has no external ornamentation. As the dog chews the toy, the toy emits a measured amount of water from valves on its surface which the dog can drink. The toys have a closable refill aperture, an internal reservoir, the aforementioned valves and possibly a surface which may be molded to resemble the typical aesthetic designs of dog chew toys already known. The toys may be composed of materials which are edible to dogs. In any event, they are composed of a resilient chewable substance that is non-toxic and yielding, so that the toy will not damage furniture if the dog tosses it around in play.

(f) Brief Description of the Drawings.

Figure 1 is a sectional view of a hamburger-shaped embodiment of the invention.

Figure 2 shows a bone shaped embodiment of the invention with cord attached.

Figure 3 shows a steak shaped embodiment of the invention bearing indicia simulating bone.

Figure 4 shows the invention in an embodiment including the valves on a nipple like structure.

Figure 5 shows a sectional view of the invention without an outer layer and with a noisemaker inside.

Figure 6 shows a sectional view of the invention with plunger type valve and arrows depicting water flow direction.

Figure 7 shows a sectional view of the invention with plunger type valve in closed position.

Figure 8 shows the invention in an embodiment featuring slit type valves that are closed.

Figure 9 shows the invention in an embodiment featuring slit type valves while the invention is compressed which opens the slits.

(g) Description of the Preferred Embodiment.

This invention confines and distributes water for use by pets in general, but most particularly for dogs (who characteristically exhibit chewing behavior). When pets are being transported or are in a remote location, providing water by a bowl type or hose type watering means is not practical. It is also not fun. It is an object of this invention to provide a fun and practical means of providing water on the go to pets such as dogs. Figure 1 is a cross-sectional view where the section is taken across a plane (1). The invention consists of a puncture resistant reservoir (2) which can hold water. The reservoir has

a fill aperture (3) through which water can be introduced. A cap (4) is provided by which the fill aperture can be closed, thereby retaining the water inside the reservoir. Possible fastening techniques for this cap would be to have a threaded screw cap or a pop top style cap. Other closure techniques can be used without departing from the spirit of this invention as long as the cap does not allow water to escape once the cap is closed. Valves (5) are present by which water can be extruded from the reservoir in measured amounts in response to pressure placed on the reservoir, such as would happen during chewing.

Alternatively suction from the outside can be used to cause water to flow through the valves. An outer layer (6) may be formed onto the outside of the reservoir of a resilient non-toxic substance. The outer layer may be molded and colored so that it has an aesthetic appearance that would be appropriate to a chew toy. While Figure 1 shows a toy that is shaped to resemble a hamburger, Figure 2 shows a toy that is shaped to resemble a bone. A carrying cord (7) may be added for convenience in carrying the dog watering toy. Figure 3 shows a dog watering toy that is shaped to resemble a steak. Indicia (9) can be painted on the outside or created by colors molded into the toy. These indicia may be for the purpose of furthering the design objectives of creating an aesthetic appearance for the dog watering toy. The outer layer can be, but is not necessarily, composed of latex, vinyl, rubber, cloth, denim, or furry substances. The valves would open outside the outer layer if an outer layer is present. The fill aperture would open outside the outer layer if an outer layer is present. When no pressure is placed on the reservoir, the valves will retain the water inside the reservoir. The valves can take the form of form fitting grooves which are sprung open by chewing pressure, one-way valves which the teeth push into and out of the reservoir, or even a nipple-like structure (14) for sucking such as that seen at Figure 4. This latter means would be useful for a dog with missing teeth or for a pet that has sucking behavior but not necessarily chewing behavior, such as a potbellied pig, for instance. The reservoir would be composed of an inexpensive, resilient and durable substance which is soft enough so that it will not damage furniture if the toy is tossed about. Among the possible forms of reservoir would be a plastic reservoir or a flexible metallic bag reservoir. If there is no outer layer, the surface of the reservoir must not be toxic to pets. It should not be toxic to pets even if an outer layer is present. The outer layer would be composed of an inexpensive, resilient and durable substance which is soft enough so that it will not damage furniture if the toy is tossed about. The outer layer of a dog watering toy designed for outdoor use would be more durable than the outer layer of a dog watering toy designed for indoor use, as a general rule. The outer layer, valves, cap, fill aperture, and reservoir could all be made of substances which are edible for dogs, such as rawhide. They could also be made of biodegradable, expendable, indigestible substances such as wood so that the dog could eventually chew the toy away to nothingness.

The reservoir could range from less than 8 ounces volume to